

AMENDMENTS TO THE CLAIMS

1. (Currently amended) A resist composition for an electron beam or EUV, comprising a compound (A) having acid dissociable, dissolution inhibiting groups, an acid generator (B), and an organic solvent comprising one or more compounds selected from the group consisting of propylene glycol monomethyl ether (PGME), methyl amyl ketone (MAK), butyl acetate (BuOAc) and 3-methyl methoxy propionate (MMP), wherein the compound (A) comprises:

~~a resin component (A-1), which undergoes an increase in alkali solubility under the action of an acid; or~~

~~a low molecular weight compound (A-2) with a molecular weight of no more than 2,000,~~

wherein the resin component (A-1) comprises a unit copolymer selected from the group consisting of:

a copolymer comprising structural units (a1) and (a3); and

a copolymer comprising structural units (a1) and (a2), wherein

a the structural unit (a1) is represented by a general formula (I) shown below within a range from 40 to 80 mol%:



wherein R represents -H or -CH₃; and

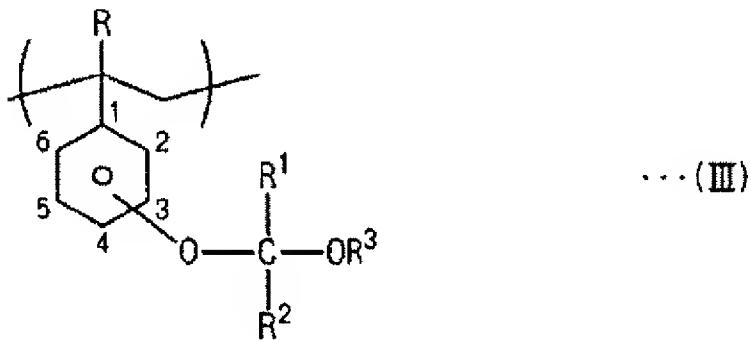
the structural unit (a2) is represented by a general formula (II) shown below:



... (II)

wherein, R represents -H or -CH₃, and X represents an acid dissociable, dissolution inhibiting group; and

the structural unit (a3) is represented by a general formula (III) shown below:



... (III)

wherein, R and R¹ each represent, independently, -H or -CH₃, R² represents -CH₃ or -C₂H₅, and R³ represents an alkyl group of 1 to 5 carbon atoms

ii) a structural unit which contains a lactone-containing monocyclic or polycyclic group, and is derived from a (meth)acrylate ester.

2. (Currently amended) A resist composition for an electron beam or EUV according to claim 1, wherein said composition satisfies formula (I) shown below:

$$\text{Film thickness (1) - Film thickness(2)} \} / (150-130) (\text{\AA} / ^\circ\text{C}) \leq 0.2 (\text{\AA} / ^\circ\text{C}) \quad (\text{I})$$

wherein, said film thickness (1) is a film thickness following application of said resist composition to a substrate in sufficient quantity to generate a film thickness of 2300 Å ± 10% and subsequent heating at 130 °C for 90 seconds, and said film thickness (2) is a film thickness following application of said resist composition to a substrate in sufficient quantity to generate a film thickness of 2300 Å ± 10% and subsequent heating at 150 °C for 90 seconds.

3. **(Previously presented)** A resist composition for an electron beam or EUV according to claim 1, wherein a degree of variation in total pressure of an atmosphere inside an exposure system between a state prior to exposure and a state following exposure is less than 4.0×10^{-5} Pa.

4. **(Canceled)**

5. **(Previously presented)** A resist composition for an electron beam or EUV according to claim 1, further comprising a nitrogen-containing compound (C).

6. **(Canceled)**

7. **(Previously presented)** A resist composition for an electron beam or EUV according to claim 1, wherein the proportion within the organic solvent of the compounds selected from the group consisting of propylene glycol monomethyl ether (PGME), methyl amyl ketone (MAK), butyl acetate (BuOAc) and 3-methyl methoxy propionate (MMP) are at least 70% by weight.

8. **(Previously presented)** A resist composition for an electron beam or EUV according to claim 1, wherein the proportion within the organic solvent of the compounds selected from the group consisting of propylene glycol monomethyl ether (PGME), methyl amyl ketone (MAK), butyl acetate (BuOAc), and 3-methyl methoxy propionate (MMP) are at least 90% by weight.

9. **(Canceled)**.

10. **(Previously presented)** A resist composition for an electron beam or EUV according to claim 1, wherein the compound (A) comprises the resin component (A-1), and the polystyrene equivalent weight average molecular weight of the resin component (A-1), determined using GPC, is within a range from 3,000 to 30,000.

11. **(Currently amended)** A resist composition for an electron beam or EUV according to claim 1, wherein the compound (A) comprises the low molecular weight compound (A-2),

with a molecular weight of no more than 2,000, in which a portion of the hydrogen atoms of hydroxyl groups within the compound containing a plurality of phenol structures have been substituted with an acid dissociable, dissolution inhibiting group.

12. **(Currently amended)** A method of forming a resist pattern, comprising the steps of applying a resist composition for an electron beam or EUV according to any one of claims 1-3, 5, 8, 10, and 11 and 7-11 to a substrate, prebaking said substrate, selectively exposing or directly patterning said substrate with an electron beam or EUV in a vacuum, post exposure baking said substrate, and conducting alkali developing to form said resist pattern.